CLAIMS

I claim:

1. A heat insulation blanket assembly for a building structure for retarding the transfer of heat between spaces in and about the building structure, comprising:

an elongated blanket of fibrous material having first and second opposed surfaces and opposed side surfaces joining the opposed surfaces,

a layer of Kraft paper extending along the length of the blanket superposed the first surface and adhesively bonded to the first surface,

sheet material extending along the length of the blanket superposed the second surface, the sheet material bearing a heat reflective surface facing the second surface of the fibrous blanket,

the fibrous blanket having surface fibers positioned at the second surface for engaging the heat reflective surface of the sheet material, the surface fibers being spaced from one another a distance to form an array of air gaps in contact with at least 80% of the reflective surface of the sheet material,

such that the surface fibers of the second surface of the blanket support the sheet material with the air gaps between the surface fibers maintaining the reflectivity of the reflective surface of the sheet material about the surface fibers.

2. The heat insulation blanket assembly of claim 1, wherein the second surface of the blanket includes an array of protrusions extending therefrom with air gaps formed between the

protrusions and the heat reflective surface of the sheet material, with the protrusions holding the reflective surface of the sheet material away from the spaces between the protrusions.

3. The heat insulation blanket assembly of claim 2, wherein the protrusions are corrugations with alternating high and low ribs facing the heat reflective surface of the sheet material and the high ribs holding the heat reflective surface away from the low ribs of the blanket.

4. The heat insulation blanket assembly of claim 1, wherein the sheet material surrounds the second surface and the opposed side surfaces of the blanket and is bonded to the Kraft paper.

5. The heat insulation blanket assembly of claim 1, wherein the blanket is formed of material selected from the group consisting of fiberglass, mineral wool, and cellulose.

6. The heat insulation blanket assembly of claim 1, wherein the sheet material is selected from the group consisting of: polyester having a metal surface, polyethylene with a metalized surface, and aluminum.

7. The heat insulation blanket assembly of claim 2, and further including adhesive applied to the protrusions of the blanket and to the portion of the heat reflective surface facing the protrusions such that the heat reflective surface clings to the protrusions of the blanket and forms air gaps between the protrusions with the air gaps in contact with the reflective surface of the sheet material.

8. The heat insulation blanket assembly of claim 3, and further including adhesive applied to the high ribs of the corrugated surface of the blanket and to the portion of the heat reflective surface facing the high ribs such that the heat reflective surface clings to the high ribs of the blanket and the low ribs form air gaps with the heat reflective surface in contact with the heat reflective surface of the sheet material.

9. The heat insulation blanket assembly of claim 1, wherein the air gaps between the surface fibers engage more area of the sheet material than the surface fibers.

10. The heat insulation blanket assembly of claim 1, wherein the sheet material has a series of spaced air openings formed therein for the passage of air into and out of the blanket.

11. The heat insulation blanket assembly of claim 1, wherein the layer of Kraft paper extends beyond the sides of the blanket and forms mounting strips along the sides of the blanket for mounting the heat insulation blanket to adjacent structures.

12. The heat insulation blanket assembly of claim 11, wherein the sheet material is connected to the mounting strips.

13. The heat insulation blanket assembly of claim 1, wherein the sheet material is loosely maintained at the second surface of the blanket and is suspended away from the blanket when supported by the Kraft paper in a position below the blanket.

14. A heat insulation blanket assembly for retarding the transfer of heat between adjacent spaces, comprising:

an elongated blanket of heat insulation material having a fibrous surface,

sheet material extending along the elongated blanket superposed the fibrous surface,

the sheet material bearing a heat reflective surface facing the fibrous surface of the blanket,

the fibrous surface having surface fibers in engagement with the heat reflective surface of the sheet material and the surface fibers are of a density sufficient to maintain an array of air gaps formed about at least 80% of the heat reflective surface,

such that the air gaps maintain the reflective properties of at least 80% of the heat reflective surface of the sheet material.

15. The heat insulation blanket assembly of claim 14, wherein the blanket is formed of material selected from a group consisting of fiberglass, mineral wool and cellulose.

16. The heat insulation blanket assembly of claim 14, wherein the sheet material is selected from the group consisting of: polyester having a metalized surface, polyethylene with a metalized surface, and aluminum.

17. The heat insulation blanket assembly of claim 14, wherein the air gaps between the surface fibers engage more area of the sheet material than the surface fibers.

18. The heat insulation blanket assembly of claim 14, wherein the sheet material has a series of spaced air openings formed therein for the passage of air into and out of the blanket.

19. The heat insulation blanket assembly of claim 14, and further including a layer of Kraft paper extending on one side of the blanket and with the sheet material extending on the other side of the blanket, and with the Kraft paper and sheet material connected to each other and surrounding the cross section of the blanket.

20. The heat insulation blanket assembly of claim 14, wherein the sheet material is loosely maintained in superposed relationship with respect to the blanket and is suspended away from the blanket when positioned below the blanket.

21. The heat insulation blanket assembly of claim 14, wherein the sheet material comprises foil.

22. The heat insulation blanket assembly of claim 14, and further including adhesive applied between the blanket and the sheet material at space intervals on the insulation blanket and bonding the sheet material at spaced intervals to the blanket..

23. A method of insulating a building structure for retarding heat transfer between spaces in and about the building structure, comprising:

providing a blanket of heat insulation with a fibrous surface that forms air gaps over at least 80% of the fibrous surface,

providing a sheet material having a heat reflective surface,

placing the heat reflective surface of the sheet material in superposed relationship with

the fibrous surface of the blanket,

supporting the sheet material with the fibers of the fibrous surface of the blanket with at least 80% of the reflective material contacted with the air gaps, and

maintaining the reflectivity of the heat reflective surface of the sheet material with air gaps between the fibers of the fibrous surface that support the sheet material.

24. The method of insulating a building structure of claim 23, and further including the step of:

placing a sheet material of Kraft paper on one side of the blanket, and

extending the sheet material about the opposite side of the blanket and attaching the sheet material to the Kraft paper to surround the blanket.

25. A heat insulated wall structure for a building structure positioned between an interior heat controlled space of the building structure and the outside environment adjacent the building structure, comprising:

a series of spaced parallel support members,

a heat insulation blanket assembly positioned between the parallel support members,

wall board applied to the spaced parallel support members between heat insulation blanket assembly and the temperature controlled space of the building structure,

the blanket assembly including an elongated fibrous blanket of heat insulation material and including a fibrous surface,

sheet material having a heat reflective surface applied to the fibrous surface of the blanket,

the fibrous surface of the heat insulation blanket having surface fibers in engagement with the heat reflective surface of the sheet material and the surface fibers being of a density sufficient to maintain an array of air gaps formed about 80% of the surface of the heat reflective surface,

such that the air gaps maintain the reflective properties of at least 80% of the heat reflective surface of the sheet material.

26. The heat insulated wall structure of claim 24, wherein the sheet material is metal foil.

27. The heat insulated wall structure of claim 24, wherein the fibrous surface is an irregularly shaped surface.

28. The heat insulated wall structure of claim 26, wherein the irregularly shaped fibrous surface is selected from shapes consisting of corrugations, protrusions, random shapes and repetitive protruding shapes.

29. A heat insulation blanket assembly for a building structure for retarding the transfer of heat between spaces in and about the building structure, comprising:

an elongated blanket of fibrous material having a broad surface,

sheet material extending along the length of the blanket superposed the broad surface, the sheet material bearing a heat reflective surface facing the broad surface of the fibrous blanket,

the fibrous blanket having surface fibers positioned at the broad surface for engaging the heat reflective surface of the sheet material, the surface fibers being spaced from one another a distance to form an array of air gaps in contact with the reflective surface of the sheet material,

a support sheet positioned on the opposite side of the blanket from the broad surface of the blanket and joined at its edges to the edges of the sheet material such that the sheet material and the support sheet surround the blanket,

such that the surface fibers of the broad surface of the blanket support the sheet material with the air gaps between the surface fibers maintaining the reflectivity of the reflective surface of the sheet material about the surface fibers.